The Jurisdiction and Its Residents

Maine is the largest and least densely populated state in New England, with most of its population concentrated in southern and coastal portions of the state, and in a broad band along Interstate 95. The area under LURC jurisdiction generally encompasses the least populous, least developed portions of Maine, most of which lie in western, eastern and northern parts of the state. This 10.4-million acre area encompasses the largest block of undeveloped forestland in the Northeast – larger than Massachusetts, Connecticut, and Rhode Island combined – and it is largely free of the state routes and populous communities that intersperse the only comparable area, New York State's six-million acre Adirondack Park.

The LURC jurisdiction is a unique natural area with a distinct character. Links to the past remain strong, and the area's natural resources continue to shape its use and value in the future, with forestry and recreation remaining dominant uses. While much of the land is actively managed for timber, many areas are left undisturbed for 10 to 80 years at a time. While clearly not a virgin forest, the region is largely undeveloped and parts of it remain relatively inaccessible due to distance and poor travel conditions. Its clean air and water, diverse natural communities, and abundant wildlife draw thousands of seasonal residents and outdoor enthusiasts each year.

Description of the Jurisdiction

Civil Divisions

Three different types of minor civil divisions exist within the jurisdiction: townships, plantations, and towns. The majority (410) are "unorganized" townships which comprise almost 90% of the area of the jurisdiction. While some townships are situated in fringe areas, most are located in the vast interior areas of the jurisdiction. Townships have no form of local government. Property taxation is administered by the state, and services normally provided by local government are funded by the state and county government.

There are currently thirty-two plantations and eight organized towns within the jurisdiction. Most are located near the fringe of the jurisdiction. While towns and plantations have the prerogative to regulate land use locally, these towns and plantations

have chosen to remain within LURC jurisdiction and authority.

Plantations are similar to towns in terms of organization and procedures, but their responsibilities and authority are more limited in scope. The eight towns presently within the jurisdiction all organized since LURC was established in 1971. Town government in these communities is no different from that in other Maine towns, except jurisdiction over land use control remains with LURC.

Portions of twelve different counties are located in the LURC jurisdiction. The bulk of the jurisdiction is within eight counties: Aroostook, Penobscot, Somerset, Piscataquis, Washington, Franklin, Oxford and Hancock Counties. Single plantations or townships are located in Lincoln, Knox, Sagadahoc and Kennebec Counties. In the unorganized townships, county governments pro-

vide or coordinate a number of basic services, including road maintenance and public safety.

A list of the towns and plantations in the Commission's jurisdiction is located in Appendix F.

Geographic Regions

The jurisdiction is defined by political boundaries that create an irregularly shaped area not easily classified into separate regions. Nevertheless, it is helpful to view the jurisdiction as being comprised of at least four regions: (1) the Northern area, (2) the Western Mountains, (3) the Downeast area and (4) coastal islands.

The Northern area is the largest and generally most remote of these regions. It is comprised of the northern sections of Somerset, Piscataquis and Penobscot Counties, and most of Aroostook County except for populated areas to the east and north. For the purposes of analyzing demographic trends, this area has been further subdivided into a Central Region – comprised of areas near Moosehead Lake and Millinocket – and Aroostook County. But geographically, this region is an unbroken expanse that is viewed by many as the true "North Woods."

The Western Mountains are located in the southwest portion of the jurisdiction, and include both the Rangeley Lakes and the Carrabassett Valley area. The area is comprised of large portions of Oxford and Franklin Counties, and shares its western border with New Hampshire and Canada.

The Downeast area is a distinct region that is located entirely to the east of Interstate 95. It is comprised of large portions of Washington County, and portions of Hancock County as well. Only two of the townships in this region actually have frontage on the coast.

The 308 coastal islands within the jurisdiction are widely scattered: the southernmost ones are located west of Bristol, the northernmost in the Lubec area. The two islands with year-round populations – Monhegan and Matinicus Plantations – are located in Lincoln and Knox Counties, respectively.

Several townships within the jurisdiction are surrounded by organized areas and are isolated from any of the above-described regions. Examples include Unity Township in Kennebec County, Albany Township in Oxford County and Argyle Township in Penobscot County.

Physiography

The jurisdiction is a quietly spectacular land of high mountains, vast forests, swift streams and major rivers, expansive lakes and jewel-like ponds, and a host of unique natural areas. Despite the signs of human activity evident in settlements, logging roads, harvested areas, and skid trails, the natural world remains the dominant presence here, and its features have long played an important role in the state's cultural and economic heritage.

The area spans several physiographic regions, and encompasses lands of considerable physical diversity, including coastal lowlands and islands, river valleys, rolling hills, mountains, and a broad plateau. The terrain ranges from relatively flat to mountainous, with elevations generally above 600 feet. Mount Katahdin, a major landmark in central Maine, marks the northern extremity of the Appalachian Mountain chain, which stretches northeast across the state from the New Hampshire border. These mountains occupy the western part of the jurisdiction, and are flanked to the north by a region of rolling hills which encompasses the watersheds of the St. John and Allagash rivers. An open, gently rolling landscape dominates northeast and central areas of the jurisdiction, and includes some good farming soils. To the southeast, small mountains parallel the Downeast coast, presenting a marked contrast to coastal lowlands.

Water is abundant in the jurisdiction. Over 11,000 miles of rivers and streams flow through the area, including the headwaters of most of the state's large rivers. Some of the larger rivers - the Penobscot, Kennebec, Androscoggin, and St. John - have important historic and cultural values because of their roles in settlement and the economy. For centuries, these rivers served as the lifelines of interior settlements, provided transport for raw materials, and supplied unlimited power to industry. Today, they continue to provide hydropower, as well as fisheries habitat and recreational opportunities. The extensive river systems in the jurisdiction are generally the most pristine in the state, and provide some of the best remote canoeing experiences in the Northeast.

Past glacial activity has left the region with a profusion of lakes. Over 3,000 lakes and ponds dot the landscape, providing a total of over 680,000 acres of surface water. These waterbodies range from ponds of less than an acre to Moosehead Lake, the state's largest lake spanning over 74,000 acres. The vast majority of these lakes have excel-

lent water quality and are a significant recreational resource. The jurisdiction contains a diverse array of lakes, but the most highly treasured are its remote ponds — inaccessible, undeveloped lakes which offer a remote recreational experience which is not easily found in the Northeast.

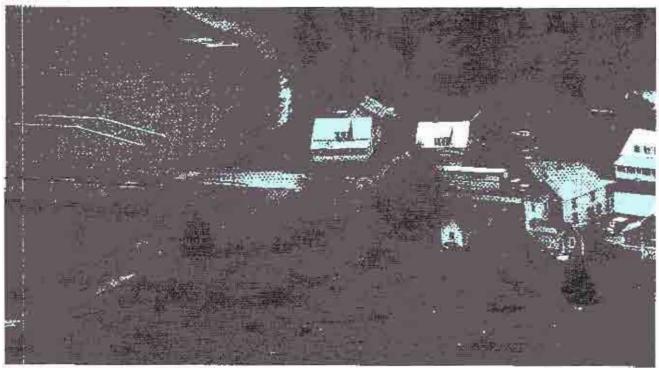
The forest, covering over 95% of the jurisdiction, is central to the region's history, economy, and way of life, and is its defining characteristic. The soils and climate are well-suited to growing trees. Spruce-fir and northern hardwoods are the dominant forest types, both of which are valuable for the manufacture of paper, lumber, and other wood products. The jurisdiction serves as the "wood basket" for the timber industry in the state. The forest is also valued for other reasons, including recreation, wildlife habitat, watershed protection, and biodiversity.

Early Settlement

The region was first inhabited by Native Americans, and many of its features bear the names given to them by these first residents – Passadumkeag Nesowadnehunk, Caucomgomoc, Mooselookmeguntic, Chesuncook. European explorers came in the 17th century to cut the white pine of coastal areas. Since that time, natural resources have dominated the history of Maine's more remote regions. The first settlements were

simply isolated outposts producing fish, fur, and timber for distant markets. It was presumed that, once timber and other resources had been utilized, the northern reaches of the state would eventually be settled for agriculture, but agricultural settlement largely bypassed the jurisdiction for a variety of reasons. Northern Maine's harsh winters and short growing season discouraged many potential settlers, and the discovery of rich soils in the west lured many settlers from the east. Agricultural settlements advanced southward from the St. Lawrence river valley, but, with the exception of the settlements in Aroostook County, were slowed by establishment of the U.S./Canadian border in 1842 by the Webster-Ashburton Treaty.

While these factors discouraged agricultural settlement, the development of the paper-making process using wood cellulose in 1867 precipitated the rise of forest management which, with the existing pattern of large landholdings, solidified the region's attractiveness for natural resource utilization. Since that time, forest management has remained the dominant use of land, as well as the backbone of the Maine economy. Most large landholdings in the north have remained relatively intact since the 1850's. Until the 1980's, changes in ownership were limited, and most land transactions were a product of efforts by large landowners to consolidate landholdings. Today, northern sections



West Forks Plantation

of the state remain dominated by large blocks of industrial forestland intermixed with large blocks of nonindustrial, usually family-owned, forestland. In central parts of the state, closer to the interstate and settled areas, small, nonindustrial ownerships are intermixed with industrial tracts. Only a small portion of the jurisdiction (approximately 550,000 acres or 5%) is publicly-owned.

Settlement patterns in the region are closely linked to resource utilization. The earliest settlements were located along rivers used to transport timber. Later, the paper-producing companies established themselves near the major rivers – convenient sources of power – on the edge of the vast wood supply. Development did not spread much beyond these one-factory towns. Since most land was held in large ownerships and the rivers provided a mode of transport for logs, there was little impetus for developing roads and other infrastructure that might have spurred settlement.

Development

The jurisdiction in 1996 continues to be distinguished by a lack of public roads and infrastructure. A handful of state routes pass through sections of the jurisdiction, but none passes through the heart of it. Nevertheless, the region has become more accessible over the years. The first dramatic change came with the construction of logging roads in the 1960's and 1970's as use of the rivers for log transport was phased out. Thousands of miles of haul roads have been constructed since 1971, many of which are maintained on a permanent basis. These roads opened up areas that were previously accessible only by canoe or by foot.

The publication of maps showing the region's extensive logging road network has further increased accessibility and public use. Some roads are gated or blocked to prevent their use by recreationists, although the majority of roads are open to the public. Thousands of people now use these roads to take advantage of the wide variety of recreational opportunities, including fishing, hunting, hiking, camping, whitewater canoeing and rafting, snowmobiling, and skiing. Water-related recreation and associated shoreline development are increasing, along with other forms of recreation such as downhill skiing and motor home camping.

The most common form of development in the jurisdiction is residential development. Types of

residential development include primitive hunting camps, seasonal cottages, second homes and year-round residences.

The overall density of residential development in the jurisdiction is roughly one dwelling per square mile. Year-round housing is concentrated in plantations, towns and townships on the fringe of the jurisdiction near job and population centers. Seasonal housing is concentrated near lakes and other high-value recreational resources.

Few commercial or industrial facilities are located in the jurisdiction, as nearby towns generally provide services and employment. Much of the commercial development in the area is recreation-based: sporting camps, campgrounds, ski areas, rafting operations, and other businesses supporting recreational activities. Some general services such as gas stations and general stores also exist. Most industrial development in the jurisdiction is related to wood production.

Communities

Communities Within the Jurisdiction

Within the jurisdiction, there are a number of communities with significant year-round or seasonal populations and distinct characters. These communities exist mostly within the 40 organized towns and plantations within the jurisdiction, but several are in unorganized townships. Most are located on the fringe of the jurisdiction, close to population centers, and dependent on larger towns or the county to provide services such as waste removal, education, and fire control. These communities are usually either traditional rural communities or recreational communities closely associated with large bodies of water and other natural resources.

Most traditional rural communities, such as Oxbow, originate from settlers' lots. Although heavily dependent on services from nearby organized towns, these communities have a strong sense of community and pride.

The economies of these small towns are based on forest products, agriculture, and related services, and do not generally involve large industries. There is a secondary reliance on provision of services to hunters, anglers, snowmobilers, and other recreationists. Up to about 1950, men worked on logging crews during the winter, on the farm during the summer, and trapped or guided hunters in the fall. Since that time, farms have steadily disappeared, employment has shifted more toward

A likely future trend for campgrounds, sporting camps and whitewater rafting operations is diversification into secondary activities as a means of attracting more business. For example, some sporting camps now remain open year-round to cater to snowmobilers and other winter recreationists. Several rafting bases and sporting camps have added campground areas and have dining facilities open to the general public. A number of campground stores cater both to campers and to the public at large. As this trend continues, it may become increasingly difficult to clearly distinguish between different recreational facilities and to assess potential impacts.

After a period of economic transition, the downhill skiing industry appears to be on the upswing in Maine. The two most significant developments over the past two decades have been the emergence of Sunday River Skiway as a major ski resort on the fringe of the jurisdiction and the proposed expansion of Saddleback Mountain Ski area. Continued growth by Sunday River, Saddleback and Sugarloaf can be expected as they compete for larger shares of the regional ski market. Downhill ski areas are likely to continue efforts at attracting more year-round business with activities such as golf, foliage viewing, and mountain biking.

Commercial and Industrial Development

Description

Few nonrecreation-related commercial services and facilities are located within the jurisdiction, as nearby organized areas often provide goods and services. The most common local businesses are general stores, gas stations, restaurants, and home occupations.

Most industry in the jurisdiction is related to wood products or energy production. Chipping mills and saw mills of various sizes and types operate in a number of townships. There are also some small, home-oriented manufacturers such as toymakers, potters, weavers, and furniture makers.

Hydroelectric power facilities in the jurisdiction include seven projects licensed by the Federal Energy Regulatory Commission (FERC), only four of which have generating equipment in place. Others are storage facilities which enhance flows to downstream generating projects. There are also 13 unlicensed hydro projects, although as of 1996,

FERC is investigating whether these should be licensed. Over the past decade, focus has shifted from constructing new dams to relicensing existing dams. (See Energy Resources section for additional discussion of hydro projects.)

In the early 1990's, there was a high level of interest in the potential of the jurisdiction for wind-generated energy. The costs of wind-generated energy have dropped significantly, and portions of the region have relatively high sustained wind velocities. To date, the Commission has reviewed one major windpower proposal.

Although interest in the state's metallic resources is increasing, commercial mineral extraction plays only a minor industrial role. Mineral exploration has been undertaken in a number of areas. Some gemstone mining occurs in the Western Mountains, generally on a small scale.

Gravel extraction occurs throughout the jurisdiction. Most gravel pits are small operations used for road construction and maintenance or for general construction in the region; several larger pits are located in fringe areas. Peat is also harvested at one site in Hancock County, primarily for horticultural use.

Overall Trends

Between 1971 and 1991, the Commission issued approximately 1,100 development permits, of which roughly 75%, or 825, were for commercial development other than recreational facilities. Of this total, 27% were classified as facilities related to industrial forestry (e.g. improvements or expansion of sawmills or gravel pits), 35% as governmental, utility or miscellaneous uses, 25% as commercial uses (e.g., retail and services), 6.5% as farming or fishing related, and 6.5% as other industrial uses. Most of these projects or activities were located in fringe areas.

No detailed projections of future commercial/industrial development in the jurisdiction are available. It is likely, however, that the rate of 50 to 60 development permits per year, which has occurred since the mid-1980's, will continue in the 1990's.

Transportation

Description

Transportation improvements are both a form of development and a prime determinant of where

Б.

development will occur. The dominant transportation mode in the jurisdiction is road travel. While accurate numbers are difficult to obtain, the 1:100,000 scale U.S.G.S. maps (mostly dated in the mid-1980's) indicate approximately 2,000 miles of public roads and 20,000 miles of private roads within the area.

Public Roads

The area's approximately 2,000 miles of public roads include arterial routes that allow relatively high speed travel through the region, collector routes that provide important connections between arterials, and local roads that move traffic within communities and provide access to adjacent properties.

Interstate 95 is a limited access four-lane highway that serves as a primary route of travel to the region from points south. The Interstate bisects several townships, but generally stays to the east of the central part of the jurisdiction and to the west of the Downeast area. Interchanges in Howland, T2 R8 NWP (to Lincoln), Medway, Sherman, Island

Falls and Oakfield serve as major gateways to the region.

Arterial routes mostly serve the western mountain and Downeast areas, or pass through fringe areas. Significantly, no arterial routes access the heart of the jurisdiction. Major arterial routes within the jurisdiction include Routes 201, 1 and 9. Minor arterials include Routes 27, 4 and 16 in the Western Mountain area, Routes 2, 2A and 6 in the Downeast region, and Routes 11, 1 and 161 in Central and Northern regions.

Other state routes serve portions of the jurisdiction, but most of these carry less traffic, functioning more as collector roads than arterials. The remaining public roads within the region are county and local roads, with paved or gravel wearing surfaces. Some of these roads serve as important links between state routes; others are lightly traveled.

Repair, maintenance and snowplowing of public roads is carried out by the state, county, or plantation government. Funds for major resurfacing and reconstruction projects are allocated by the Maine Department of Transportation.



Logging Fload east of Moosehead

Private Roads

Most of the roads within the jurisdiction are privately owned and maintained. Approximately 20,000 miles of these roads crisscross the area, providing the forest products industry with a vital link between its resource base and markets.

Extensive private road construction began after the cessation of log drives on Maine rivers. Spurred by the rush to harvest trees damaged by the spruce budworm, road construction during the 1980's peaked at an estimated 1,000 miles per year. While the pace of construction has probably slowed, new private roads continue to be constructed, providing improved access to backcountry areas. Of the 1,200 notifications received annually by the Commission, approximately half include some new private road construction or road improvements. Some of the roads built for logging are gated and others are permanently closed after harvesting. According to the Maine Paper Industry Information Office, however, approximately 98% of private roads remain available for public use.

Other Transportation Modes

Rail service, once a major mover of passengers and freight in Northern Maine, now plays a relatively minor transportation role. The Canadian-Pacific line that runs between Vanceboro and St. Croix has historically been an important rail link for the paper companies and has maintained limited passenger service. Freight service on that line is expected to continue, but the future of passenger service is uncertain. Freight is also carried on other lines in Aroostook, Washington and Penobscot Counties.

Air travel is limited to nonscheduled service by float plane and at small airfields in gateway communities. Ferry service is available to Monhegan and Matinicus – two coastal island communities in the Commission's jurisdiction.

Future Trends

Most future roadbuilding in the jurisdiction will be private roads. At this time, there are no plans for construction of any new state routes through the jurisdiction. A feasibility study is planned for a new or improved route from Houlton to Fort Kent. The main changes to the public road system will occur as the result of improvements made to state and county roads and construction of new roads within subdivisions.

The pace of private road construction has slowed since the 1970's and 1980's, but the amount of road construction each year is still significant. Based on the road construction notifications submitted to the Commission by landowners, an estimated 500 miles of roads are constructed annually. Much of this involves construction of spurs and winter roads off of the major access roads. Some road construction entails the reopening of older roads that have not been used since the time of a previous harvest.

Other Infrastructure and Services

Other public facilities and services within the jurisdiction include fire and police protection, education, solid waste disposal and public utilities. These facilities and services are most available near fringe areas, where the majority of the year-round population resides.

Public Safety

Although a few towns and plantations have their own fire and rescue units, fire protection and emergency services for most unorganized communities are provided through county government, which arranges contracts with neighboring organized towns. Forest fire protection is provided by the Department of Conservation, Maine Forest Service. County sheriff departments, the Maine State Police and plantation police are responsible for law enforcement.

Education

Public education for residents of the jurisdiction is available either from state-operated schools or from adjacent educational units. As of 1996, primary or secondary schools were located in Edmunds, Connor and Kingman townships, Rockwood Strip (T2 R1) and Sinclair (T17 R4 WELS). Besides their educational function, these facilities also provide community meeting space and opportunities for organized recreation.

Solid Waste Disposal

The disposal of household and commercial wastes are handled in a variety of ways. Plantations run their own solid waste facilities or pay to use facilities in neighboring towns. In the unorganized

townships, county commissioners make arrangements for solid waste disposal. Communities on the periphery of the jurisdiction tend to use landfills in nearby organized towns.

Increasingly, however, the jurisdiction is being considered as a potential site for regional and statewide solid waste facilities. This is due in part to the large land ownership patterns, the availability of relatively inexpensive land, and low population densities. Areas within the jurisdiction were under active consideration as low-level radioactive disposal sites prior to agreements being reached with other states to send such waste elsewhere.

Spreading of paper mill sludge, agricultural wastes, and other residuals also occurs within the area. Most of this spreading occurs on lands owned by the companies that generate the wastes.

Water and Subsurface Waste Disposal

Only a small portion of the dwellings and facilities in the jurisdiction are served by public sewer or water. Most of these users are adjacent to larger, organized communities with sewer or water districts. The vast majority of dwellings, businesses, and other facilities draw water from wells, springs, or nearby surface water sources and dispose of sewage in on-site septic systems or privies.

According to the 1990 Census, 63% of the housing units in the jurisdiction have individual wells, 12% have public water, and 25% have some other form of water supply. The Census also reported that 73% of the units have septic systems, 7% had public sewer, and 21% had another means of waste disposal, most likely, pit privies. It is probable that some of the housing units served by "public" facilities rely on shared wells or clustered septic systems located near the sites.

The Commission applies the State's Subsurface Waste Disposal Rules and its own lot size standards to assure that new systems are located on suitable soils and are properly designed and constructed.

Public Utilities

Electric and phone service are the main public utilities serving the jurisdiction. While most year-round homes have electricity and telephones, a substantial percentage of seasonal homes have neither. These homes are typically located in more isolated areas that are distant from existing utility distribution lines.

The main providers of electricity are Central Maine Power, Bangor Hydro-Electric Company, and Maine Public Service Company. Several smaller electric utilities provide power as well. The power distribution system is comprised of transmission lines, which transport high voltage electricity long distances, and distribution lines, which carry power to homes and businesses.

New England Telephone Company (NYNEX) is the main provider of local phone service, but several smaller independent phone companies provide service as well. Modular phone service is also now available to many locations within the jurisdiction.

Trends

In general, the communities of the jurisdiction will continue to rely on facilities and services from organized towns. Population and housing growth will continue to increase demand for services and facilities, but if most development is located relatively close to organized areas, service costs per new dwelling unit and environmental impacts will likely remain low.

In less populated areas of the state, school districts have been consolidating. The slow growth in the jurisdiction's year-round population makes an increase in demand for education facilities unlikely. The most noticeable education-related impact may be on the governments of high-growth communities which must pay increased educational costs and provide bus service to serve new year-round development and conversions in areas that were previously only seasonally occupied.

Due to the closure of town dumps throughout the state, there may be a need for new landfills in environmentally suitable locations. Siting these facilities in more populated areas is often difficult due to local opposition; townships near organized areas may be increasingly viewed as locations for waste disposal sites.

Between 1971 and 1991, the Commission issued 525 permits for utility extensions. Many of these permits allowed short connections to existing utility lines. A number were for longer extensions to serve existing or new development. One permit was for a major power transmission line in Washington and Hancock Counties. Maine is located between a major regional user of power (southern New England and New York) and several power producers in the Canadian provinces. It may be that Maine continues to be viewed as a corridor

for transmission of energy and energy-producing natural resources.

As utilities seek new customers and owners of camps request electric and phone service, applications for future extensions into more remote areas are likely. Extension of utilities into an undeveloped area generally makes it more attractive for year-round development. A more significant, ongoing trend, however, is the extension of electric power to older seasonal developments that previously relied on hand pumped water and privies.

While verbal communication remains the most common use of telephones, technological advances are revolutionizing the use of phone lines as a vital link in an expanding communication network. Interconnected computers and facsimile machines now allow for rapid transfer of information over long distances, and it is likely that many residents of the jurisdiction will want to take advantage of these technologies. Some parts of the area are served by cable television as well, and cable lines may also become important links for a variety of communication technologies. These developments provide increased opportunities for those who wish to live in relatively remote areas and work out of their homes.

Areas with Special Planning Needs

Development in the jurisdiction has generally been concentrated along shoreland areas, around ski resorts, and near organized towns. The first Comprehensive Land Use Plan, adopted in 1976, identified several areas of rapid growth, including the Rangeley Lakes, Moosehead Lake and Carrabassett Valley region.

Examination of growth trends indicates that these regions continue to attract development. These three areas are part of the Western and Central Mountain regions, which received approximately 88% of the jurisdiction's new seasonal housing during the 1980's. These same regions are projected to receive approximately 90-92% of new seasonal homes, or 2,500-2,600 units, in the 1990's.

These areas also possess concentrations of high-value natural resources that are potentially threatened by continued high rates of growth. In its planning and zoning efforts, the Commission will pay particular attention to these areas to ensure that development is accommodated without compromising their special qualities.

In addition to these high-growth areas, several other regions or communities experienced moderate growth during the 1970's and 1980's, or possess characteristics that make significant future growth likely. Some of these areas have high concentrations of recreational and natural values that attract development; other communities owe their growth to their accessibility or location near a population or employment center. The Millinocket region is particularly worthy of note because of its abundance of high-value resources, its accessibility and its proximity to a major job center. The area is also an excellent candidate for regional planning to ensure future growth does not erode its principal values.

Rangeley Lakes Area

The multi-recreational resort nature of this region, which includes the Rangeley Lakes and Saddleback Mountain Ski Area, has made it particularly attractive to residential and recreational development. It has been the jurisdiction's most rapidly growing area. The area has an abundance of high-value natural resources: numerous large lakes — some relatively undeveloped — and panoramic views from encircling hills and ridges, which are also traversed by the Appalachian Trail. Yet the area is accessible by several state routes and is within 20 miles of a number of population and employment centers, including Rumford/Mexico, Farmington and Bethel.

Rangeley, Dallas, and Sandy River plantations have been the focus of the most intensive development permit activity in the jurisdiction. Between 1971 and 1991, a total of 565 new building permits were issued in these three plantations. Census data shows an increase of 472 residential dwelling units between 1970 and 1990, indicating that, as of 1990, almost 100 pending building permits had not yet been exercised in these three communities. Nearby Lincoln and Magalloway plantations and Adamstown Township have experienced significantly less development activity, but their location and extensive lakefront areas make them attractive areas for future growth.

The plantations and townships of the Rangeley Lakes are part of the jurisdiction's Western Mountain region (Oxford and Franklin Counties), which grew in population by 14% from 1980-1990 and 47% from 1970-1990. The region's share of the total number of seasonal homes in the jurisdiction increased from 14% to 17% during the 1980's, and is expected to increase further.

large lots were further divided into 23 additional large lots ranging in size from 41 to 479 acres (see map on page 117).

The pattern of lot creation described above is a significant departure from the jurisdiction's historical pattern of development. Prior to 1970, most scattered development in the interior of the jurisdiction was in the form of relatively primitive camps on small lease lots. For the most part, the pattern of large landholdings remained unbroken. The creation of a significant number of new lots in interior areas – especially lots in the 40- to 499-acre range which are so consumptive of land for a building lot – is unprecedented, as is the trend of seasonal dwellings being built or improved as permanent second homes.

Impacts of Development

Evaluation of Benefits

Development between 1971 and 1991 has provided jobs, housing and improved services and facilities for the residents of the jurisdiction. Some development has also supported or enhanced the jurisdiction's principal values. New businesses and facilities related to wood products have reinforced and strengthened the jurisdiction's role as a diverse, working forest.

The development and improvement of sporting camps, campgrounds, individual campsites and boat ramps during the 1971-1991 period have enhanced primitive recreational opportunities, as has the expansion of the private road and trail network. Ski area expansion and the growth of the commercial whitewater rafting industry have supported more intensive recreational uses in particular areas. Tourism is a mainstay of Maine's economy, and recreational development in the jurisdiction has contributed to this sector.

New development has benefited local building contractors and suppliers. Some forms of development, particularly commercial and industrial uses, have generated substantial tax revenues while requiring a minimum of services and facilities.

Residential development has mixed benefits. The construction of year-round dwellings has provided often affordable housing to existing residents and newcomers. New year-round residents can serve to invigorate established communities, buttress the local labor force, and provide clientele to local businesses. Seasonal development can also

benefit local retail and service establishments and provide Mainers and visitors with opportunities to enjoy the jurisdiction's outstanding recreational resources.

New residential development is often viewed favorably from a fiscal standpoint because of increased tax revenues. The costs of added services and facilities associated with residential development, however, usually more than offset tax revenues. This is particularly true with year-round housing requiring a full range of services, including education. New year-round housing has been least costly to serve when located near facilities and services in adjacent organized communities.

Seasonal housing requiring few services is most likely to yield fiscal benefits. But the location of many seasonal homes away from existing services and facilities increases potential service costs. During the 1971-1991 period, seasonal housing has increasingly been constructed as permanent second homes geared to multi-season use and possible conversion. The fiscal benefits of seasonal housing can therefore be limited or fleeting, particularly second home development in more remote areas.

Remote camps are a form of low-impact seasonal development that may be appropriate in many locations where second homes may not. Under the Commission's rules, remote camps are defined as dwellings "consisting of not more than 750 feet of gross floor area that is not served by any public utilities, except radio communications." These structures may best approximate the primitive hunting and fishing cabins that have long been scattered throughout the jurisdiction. This type of seasonal development is characterized by low service cost and low impacts; at low densities, it may be most conducive to maintaining the values of interior areas.

Evaluation of Adverse Impacts

Some adverse impacts are easy to identify and to avoid or mitigate; others are difficult to recognize or prevent. Full consideration of adverse impacts requires keeping abreast of scientific research and documentation, while recognizing that many impacts are subtle and incremental. Sometimes, by the time degradation of a value is clearly detected, the value may be lost, or remedial action infeasible. The Commission, therefore, will approach the identification of potential adverse impacts with a balance of good science and reasonable foresight.

In evaluating the impacts of development, the Commission has focused on residential construction because it is by far the most common form of structural development in the jurisdiction. The most prevalent type of residential development – second homes – is most likely to be located in areas with high-value resources.

Recreational facilities and other commercial and industrial activities also have potential for significant adverse impacts on the jurisdiction's principal values. However, these types of development are likely to occur at lower densities, and their impacts are likely to be project specific rather than cumulative. (Some of the potential impacts associated with these larger developments are discussed in sections on recreational resources, energy resources and geologic resources.)

The Commission has determined that the development that occurred between 1971 and 1991 had minimal adverse impacts on a number of distinctive natural resources that are clearly tied to a physical feature or location. These resources include deer wintering areas, high mountain zones, a number of remote, pristine ponds, large nonforested wetlands. Class A rivers and selected recreational trails. The most effective method of minimizing adverse impacts on these types of resources is to guide development away from them, and over the past two decades the Commission has effectively pursued this approach. Landowner stewardship or lack of accessibility has also contributed to the protection of some of these resources.

Not all of the jurisdiction's principal values, however, are linked to a distinct physical feature or location, or confined to a particular zoning district. In fact, as previously mentioned, many values are tied to the maintenance of large blocks of undeveloped forestlands. Values such as fish and wildlife habitat, ecological diversity, water quality and forest resources can be significantly affected by development activities that occur outside of specific protection zones or buffers. Values associated with primitive recreation opportunities and remote, undeveloped character can be similarly affected.

The Commission has determined that the development pattern that has taken place since 1971 is not conducive to protecting these types of values. A significant amount of development occurred in interior areas on lots that received no Commission review as to the appropriateness of their location for future residential growth. The pattern of land division and development evident in

interior areas such as depicted by examples in this plan is clearly less than optimum for preserving the special values of these areas.

The most likely impacts on principal values from such patterns of development include:

- Loss of productive forest land and reduction in productivity of forestlands divided into smaller ownerships.
- Conflicts between residential uses and other uses of the forest. Development of remote areas typically results in increased nuisance complaints regarding forest practices, recreational use, and wildlife.
- Negative impacts on wildlife habitat and ecological values due to permanent clearing and conversion of land to development, intrusions into riparian zones and other habitat, and increased erosion and sedimentation.
- Degradation of water quality as a result of incremental development in sensitive watersheds or on lakes with high concentrations of existing development.
- Visual impacts on previously undeveloped roadsides, waterbodies, and hillsides.
- Loss of primitive recreational opportunities and natural character values as more remote areas are developed and access is improved.
- Increased demand for community services for dispersed development in more isolated areas, resulting in negative fiscal impacts on communities and taxpayers.

The location of most development in fringe areas is a favorable trend from the standpoint of protecting the values of interior areas. But much of this development occurred in fringe areas with high natural resources values, and impacts on these values need to be considered as well. The Rangeley Lakes and Moosehead Lake regions received considerable development during the 1971-91 period, and will likely continue to be the principal growth areas in the jurisdiction. While well-planned growth is appropriate in these areas, a haphazard growth pattern has the potential to degrade the attractiveness of these areas as recreational centers, and ultimately their tourist-based economies.

Some of the growth in these areas has occurred in a compact manner near the regional

servation that was a part of the original prospective zoning plan. In these situations, the most important consideration will be whether new areas proposed for rezoning are viable growth centers and consistent with the initial prospective zoning plan.

Considering Infrastructure Improvements

While the Commission believes that the siting of roads can have unforeseen impacts, this plan does not make recommendations to regulate the location of land management roads to control the location of development. The Commission recognizes the importance of the haul road network to the forest products industry, and road siting issues, where identified, will be addressed in a cooperative manner. If the Commission is able to review the location of new lots that are now exempt from subdivision review, the issue of roads facilitating scattered development will be at least partially addressed.

The Commission will continue to monitor the location of new land management roads and the closure of existing ones. By conducting a more comprehensive inventory of the jurisdiction's road network, the Commission will be in a better position to track the relationship between road construction and development.

The Commission does have considerable control over utility extensions, and the potential impact of proposed extensions will be carefully evaluated. Both the immediate site impacts and the long-term impacts of bringing utility services into an area will be important considerations. A prospective zoning approach will provide additional direction on which areas are most appropriate for utility extensions.

Other Major Issues

Economic Development

While the Commission is charged with protecting the values of the jurisdiction, it will ensure that reasonable economic development is accommodated, particularly facilities related to forestry, agriculture or recreation. Considerable opportunities exist for facilitating economic development in appropriate areas, and the Commission will reexamine its standards to assess their effect on economic growth.

The issue most commonly identified as a potential impediment to economic development is

the permitting process. The Commission made a significant effort in 1988 to streamline its permitting process by broadening the definition of activities for which permitting would be expedited. The Commission will continue to seek out opportunities for further streamlining. Every effort will be made to make the permit turn-around time no longer than absolutely necessary to complete a thorough review in which the Commission's statutory responsibilities are carried out.

The Commission will expedite the permitting process by (1) simplifying application forms, (2) identifying minor activities and alterations for which no permit is required, (3) designating permits which could be issued at the field office level as staffing becomes available to perform such function, (4) delegating to staff the ability to act on small-scale rezoning proposals within designated growth areas which meet the Commission's rezoning guidelines, and (5) identifying types of uses that could receive accelerated review and approval. Examples of such uses include accessory structures and expansions that comply with certain size and location requirements, and new structures on lots which are either part of LURCapproved subdivisions or within districts prospectively zoned for development, particularly for sites located away from shoreland areas.

A number of enterprises support or reinforce the principal values of the jurisdiction, and these types of activities will be promoted, not hindered, by the Commission's policies and regulations. Certain facilities, for instance, can provide a means of recreational use with less impact than a large number of individual second homes or camps. In more remote areas, traditional, nonintensive facilities such as sporting camps or primitive campsites are most appropriate, and the Commission's policies and regulations will promote these types of uses.

Traditional sporting camps represent both a recreational asset and a valuable part of the heritage of the North Woods. The Commission's approach to these facilities will recognize their need to adapt to changing economic conditions and their dependence on the remote character of their surroundings. Permitting of reasonable expansions and improvements will be facilitated, with assurances that camps will not evolve into more intensive uses that could have negative impacts on the area. Proposals for other development adjacent to sporting camps will be reviewed with particular care to ensure that values on which the camps depend for their survival are not eroded.

- Protect the scenic values of coastal, shoreland, mountain, recreation, and other scenic areas.
- Regulate forestry activities in important recreational and scenic areas to protect aesthetic qualities.

II Development

(issues discussion pages 125-131)

A. Location of Development

Goal: Guide the location of new development in order to protect and conserve forest, recreational, plant or animal habitat and other natural resources, to ensure the compatibility of land uses with one another and to allow for a reasonable range of development opportunities important to the people of Maine.

Location of development on a jurisdiction-wide level:

Policies:

Provide for a sustainable pattern of development consistent with historical patterns which directs development to suitable areas and safeguards the principal values of the jurisdiction, including a working forest, integrity of natural resources, and remoteness.

- Discourage growth which results in scattered and sprawling development patterns.
- Guide development to areas near existing towns or communities and in other areas identified as appropriate development centers.
 - a. Identify a group of towns, plantations and townships which are the most appropriate for growth when considering: (1) proximity to organized towns and population centers; (2) compatibility of natural resources with development; (3) demonstrated demand for development; (4) accessibility by major routes; and (5) availability of infrastructure which is, when compared to conditions in other towns, the best prepared to accommodate growth.

- Outside of towns, plantations and townships identified as the most appropriate for growth, identify areas that are appropriate as development centers and encourage compact patterns of development around these areas.
- c. Guide the location of different types of residential development according to potential impacts, infrastructure needs and the potential for conversion to a more intensive type of residential use.
 - Encourage year-round residential development near existing towns and communities, particularly in the towns, plantations and townships identified in 3.a above, where it can be efficiently served by existing services, facilities and utilities.
 - (2) Encourage second home development near existing towns and communities, particularly in the towns, plantations and townships identified in 3.a above, and near development centers identified in 3.b above.
 - (3) Allow remote camps at low densities throughout the jurisdiction.
- 4. Guide proposals for major new waste disposal and similar facilities to locations on the fringe of the jurisdiction that have good existing road access, low natural resource values, and are separate from incompatible land uses.
- Encourage conservation of select areas of the jurisdiction that are particularly representative of the jurisdiction's principal values and, overall, are especially valued for their remote and relatively undeveloped condition.
 - a. Work cooperatively with landowners to encourage the designation of large tracts of land with these values for limited or no development.

Location of development on a community or regional level:

Undertake prospective zoning for development, particularly within areas of the jurisdiction where there is a need to achieve balance between expected development pressures and high resource values.

- 7. In communities or areas without prospective development zoning, encourage orderly growth within and proximate to existing, compatibly developed areas i.e. existing development of similar type, use, occupancy, scale and intensity to that being proposed, or a community center with a range of uses for which the proposed development will provide complementary services, goods, jobs and/or housing.
- Allow well planned development in areas appropriate as new development centers where: (a) there is a demonstrated public demand for and benefit from the proposed development in that area: (b) there is a demonstrated need for locating the development not proximate to established developed areas; (c) the productivity of existing forest and agricultural resources in the jurisdiction is not unduly harmed; (d) recreational resources and uses are not unduly harmed; (e) remote, natural and plant or animal habitat values are not unreasonably degraded; and (f) needed services are available or can be provided without unreasonable financial, social or environmental costs to the public.
- 9. In areas which are not appropriate as new development centers, allow for (a) planned developments which depend on a particular natural feature, subject to site plan review, and (b) other development, subject to concept plan review.
- Permit subdivision for the purpose of development only in areas zoned for development.

B. Economic Development

Goal: Balance the economic benefit that Maine people derive from the natural resource-based industries of the Commission's jurisdiction, especially the maintenance and creation of quality jobs, with protecting the environmental quality and special values of this area.

Policies:

- Encourage those forest and recreation industries and other resource-based enterprises which further the jurisdiction's tradition of multiple use without diminishing its principal values.
- Prospectively identify areas appropriate for development, thereby building economic centers, reducing sprawl, and minimizing the cost of providing needed services.
- Provide for expansion needs of intensive developments where such expansion will not have an undue adverse impact on the resources of the area.
- 4. Allow new or emerging technologies, but limit the scale or application of these technologies where necessary to allow time for the Commission to evaluate the technology and its impacts.
- Continuously review permitting procedures to identify means to expedite the permitting process while accomplishing the agency's purposes.
- Encourage economic development in the towns, plantations, and townships identified as the most appropriate for future growth.

C. Site Review

Goal: Assure that development fits harmoniously into the existing natural environment.

Policies.

- Require that provision be made for fitting development harmoniously into the existing natural environment, including
 - Requiring the use of buffers, building setbacks, and landscaping to minimize the impacts of land use activities upon one another and to maintain the scenic quality of shorelines and roadways,
 - Requiring that developments provide for adequate parking and traffic circulation, and
 - c. Limiting the number and size of signs in order to prevent undue or hazardous visual impacts.

- Prevent the degradation of natural and cultural values resulting from cumulative impacts of incremental development.
- Encourage site designs which have a minimal impact on the principal values of the jurisdiction, including clustering or open space preservation, and discourage unnecessarily large lot sizes.
- Provide an educational program to guide land development in a manner consistent with the goals and policies of this Plan and regulations promulgated pursuant to this Plan.
- Provide incentives for lot owners to bring nonconforming uses and structures into compliance or closer to conformance with the Commission's regulations.
- Limit expansions of nonconforming uses and structures.

D. Infrastructure

Goal: Ensure that infrastructure improvements are well planned and do not have an adverse impact on the jurisdiction's principal values.

Policies:

- Discourage the construction of major new public roads which would degrade the natural character of remote areas.
- 2. Require that new utility lines, pipelines, and their associated facilities be (a) located within or adjacent to existing utility or public road rights of way to the extent practicable; (b) constructed and landscaped so that they do not degrade natural values; and (c) located so as not to inappropriately encroach upon or change the character of remote areas, or produce an intensity of use that is inappropriate for a particular area.
- Monitor the installation of new road networks in order to anticipate and plan for future growth and public access and use in appropriate areas.
- Require that communication towers be dismantled and removed from the site when such towers are unused for an extended period of time.
- Require that communication towers be made available for other users where

feasible in order to limit the number of such towers.

E. Development Rate, Density and Type

Goal: Ensure that development is of a rate, density, and type conducive to maintaining the jurisdiction's principal values.

Policies:

- Monitor the rate of development throughout the jurisdiction to ensure it remains at a reasonable pace, particularly outside areas identified as the most appropriate for growth.
- Establish appropriate guidelines for development (such as density or similar standards) in areas where necessary to prevent adverse impacts on the principal values of the jurisdiction.
- Limit development to low-impact structures in areas where the principal values of the jurisdiction are threatened by more intensive development.
- Limit conversion of remote camps to more intensive uses where such conversion would have an undue adverse impact on the principal values of the jurisdiction.
- Encourage development that is energy efficient and that incorporates best practical technologies to conserve energy.
- Limit residential densities on the basis of soil suitability and other site limitations.

III. Education and Enforcement

Goal: Administer an effective education and enforcement program in regard to the laws, regulations and standards of the Commission in order to ensure landowner and public awareness and compliance.

Policies:

 Carry out a balanced but vigorous enforcement effort to identify, investigate, and pursue significant violations of the laws and legal requirements administered by the Commission.